**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for AP32164PU-N

## MAP1LC3A (D106) Rabbit Polyclonal Antibody

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Applications:** | IF, WB |
| **Recommended Dilution:** | **ELISA:** 1/1,000.<br>**Western blot:** 1/50-1/100.<br>**Immunocytochemistry:** 1/50-1/100. |
| **Reactivity:** | Human |
| **Host:** | Rabbit |
| **Isotype:** | Ig |
| **Clonality:** | Polyclonal |
| **Immunogen:** | KLH conjugated synthetic peptide between 92~121 amino acids from the center region of human LC3 (APG8a) (D106) |
| **Specificity:** | This antibody recognizes Human LC3 (APG8A) (D106). |
| **Formulation:** | PBS containing 0.09% (W/V) Sodium Azide as preservative<br>State: Aff - Purified<br>State: Liquid purified Ig fraction |
| **Concentration:** | lot specific |
| **Purification:** | Protein A column, followed by peptide affinity purification |
| **Conjugation:** | Unconjugated |
| **Storage:** | Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.<br>Avoid repeated freezing and thawing. |
| **Stability:** | Shelf life: one year from despatch. |
| **Gene Name:** | microtubule associated protein 1 light chain 3 alpha |
| **Database Link:** | NP_115903.1<br>Entrez Gene 84557 Human<br>Q9H492 |

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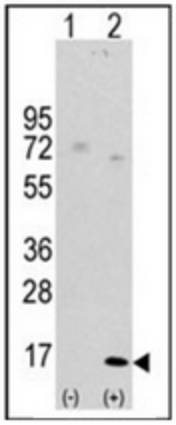
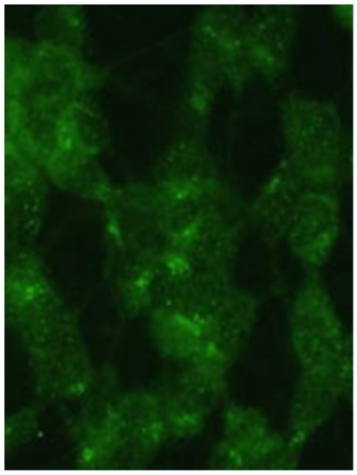
**Background:** Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). MAP1A and MAP1B are microtubule-associated proteins which mediate the physical interactions between microtubules and components of the cytoskeleton. These proteins are involved in formation of autophagosomal vacuoles (autophagosomes). MAP1A and MAP1B each consist of a heavy chain subunit and multiple light chain subunits. MAP1LC3a is one of the light chain subunits and can associate with either MAP1A or MAP1B. The precursor molecule is cleaved by APG4B/ATG4B to form the cytosolic form, LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II.

**Synonyms:** MAP1A / 1B light chain 3 A, MAP1A/1B light chain 3 A, MAP1A/MAP1B LC3 A, MAP1 light chain 3-like protein 1, MAP1LC3A, LC3A

## Product images:




Western blot analysis of LC3 (APG8a) (arrow) using Autophagy LC3 Antibody (APG8a) (D106). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the LC3 (APG8a) gene (Lane 2) (Origene Technologies).



SY5Y cells were pretreated with 5nM bafilomycin for 24hr and fixed in methanol. Treatment with Autophagy LC3 Antibody (APG8a) (D106) at dilution 1/100. Data courtesy of Jianhui Zhu, MD, PhD & Charleen T. Chu, MD, PhD, University of Pittsburgh School of Medicine.